

**WHAT IS CLAIMED IS:**

1. A method of adjusting the sensitivity of an optronic fuse system which comprises a transmitter, a receiver, an amplifier chain, and a sensor connected ahead of the receiver and of the amplifier chain; comprising effecting in a single calibration cycle, the steps of:
  - (a) measuring a signal level during operation of the system; and
  - (b) adjusting the sensitivity of the optronic fuse system by setting only the sensitivity of the sensor.
2. A method according to Claim 1, wherein the adjusting of the optronic fuse system is obtained for a medium measured value from which there is derived a temperature compensation.
3. A method according to Claim 1, wherein a gain factor which is dependent upon said measured signal level is stored into a controller for setting the sensitivity of said sensor.
4. A method according to Claim 3, wherein said sensor comprises an avalanche-photodiode (APD), said avalanche-photodiode having a bias voltage which is set by the controller.
5. A method according to Claim 4, wherein said bias voltage is set in dependence upon temperature.

6. A method according to Claim 4, wherein a temperature compensation is implemented during the operation of the optronic fuse system commencing from a working point in a temperature curve for the avalanche-photodiode which corresponds to a specified reference sensitivity.
7. A method according to Claim 4, wherein said controller is loaded with an operating software system for the purpose of adjusting the optronic fuse system, through which said avalanche-photodiode is set to a medium gain factor.